

**PATTERN DETECT AND  
BYTE ALIGN CIRCUIT USING CAM**

**ABSTRACT OF THE DISCLOSURE**

5        A method detects a programmable pattern (*e.g.*, Ethernet comma or SONET A1A2 frame) and simultaneously byte aligns to that pattern. The technique uses a content addressable memory (CAM) programmed (*e.g.*, selected by the user) with a particular pattern to enable detecting of a symbol or symbols, or pattern, of bits in an incoming serial stream. The circuitry deserializes the serial stream and byte aligns parallel data based on output from the  
10      CAM and a state machine.